

METHOD AND APPARATUS FOR BEAM SWITCHING IN A WIRELESS COMMUNICATION SYSTEM

ABSTRACT

In a CDMA data communication system capable of variable rate transmission, utilization of beam switching techniques decreases the average interference caused by transmissions of a base station to subscriber stations within a cell, and in neighboring cells. Base stations utilize multiple transmit antennas, each transmitting signals at controlled amplitudes and phases, to form transmit signal corresponding to sector divisions. Data and reference signals are transmitted along sector division beams that alternate according to fixed time slots in order to increase system capacity and data rates by maximizing carrier-to-interference ratios (C/I) measured at subscriber stations.